IN THE CLAIMS

Please amend the claims as follows.

1. (Previously Presented) A method for storing and transmitting image data between occasionally-connected devices, the method comprising:

separating the image data into separate color planes, according to a particular color space;

transforming each of the planes into separate bands, based on frequency information present in each plane;

quantizing each band of each of the planes to a particular bit depth;

coding each band of each of the planes for compressing the image data;

based on quality and resolution provided by each band at a certain bit depth, organizing the bands into a plurality of layers suitable for progressive transmission to a target device, wherein a layer from the plurality of layers includes a subset of bitplanes from a first band from the separate bands and a subset of bitplanes from a second band from the separate bands; and

transmitting a selected one of said plurality of layers from the first device to the second device.

2. (Original) The method of claim 1, wherein said particular color space comprises YUV color space.

3. (Original) The method of claim 1, wherein said particular color space comprises RGB color space.

4. (Original) The method of claim 1, wherein the image data stored in memory comprises mosaic image data.

5. (Original) The method of claim 1, wherein said step of organizing the bands into a plurality of layers comprises:

organizing the bands into a plurality of layers of a quality/resolution matrix.

6. (Original) The method of claim 1, wherein said step of organizing the bands into a plurality of layers comprises:

selecting one or more particular bands to comprise a given layer, each band being represented to a particular bit depth.

7. (Original) The method of claim 1, wherein each layer stores image data for rendering the image at a particular resolution and a particular quality.

8. (Original) The method of claim 1, wherein a first layer of said plurality of layers stores information pertaining to rendering the image at low resolution and low quality.

9. (Original) The method of claim 8, wherein said first layer comprises a subset selected from the smallest ones of the bands.

10. (Original) The method of claim 9, wherein said first layer stores each band of said subset only to a particular bit depth.

11. (Original) The method of claim 1, wherein each layer includes information from all color planes.

12. (Original) The method of claim 1, wherein the layers are interdependent.

13. (Original) The method of claim 1, wherein the layers are independent from one another.

14. (Original) The method of claim 1, wherein said transmitting step includes:

transmitting attribute information indicating basic features of the image.

15. (Original) The method of claim 14, wherein said attribute information includes selected ones of width and height of the image, aperture and exposure time

used to capture the image, analog gains of the sensor when the image was captured, and a timestamp for the image.

16. (Original) The method of claim 14, wherein said attribute information includes a thumbnail bitmap of the image.

17. (Original) The method of claim 1, wherein said memory comprises a frame buffer for storing image data.

18. (Original) The method of claim 1, wherein said first and second devices are occasionally connected wirelessly.

19. (Original) The method of claim 1, wherein said first and second devices are occasionally connected over a wireline connection.

20. (Original) The method of claim 1, wherein said step of transmitting a selected one of said plurality of layers from the first device to the second device comprises:

initially transmitting a first layer of said plurality of layers; and

upon reconnection of the two devices at a later point in time, transmitting subsequent layers of said plurality of layers.

21. (Original) The method of claim 1, further comprising:

disconnecting the two devices;

at a later point in time, re-establishing a connection between the two devices;

transmitting an additional layer of said plurality of layers while the two devices are connected; and thereafter

disconnecting the two devices.

22. (Original) The method of claim 1, wherein said second device controls which layers are transmitted.

23. (Original) The method of claim 1, wherein said step of organizing the bands into a plurality of layers includes:

storing each layer as a record.

24. (Original) The method of claims 23, wherein each record is stored as a file in a file system of the first device.

25. (Original) The method of claim 24, wherein said step of organizing the bands into a plurality of layers includes:

storing a record directory for accessing a record for a particular layer.

26. (Original) The method of claim 25, wherein said record directory includes a directory entry storing a filename for each record.

27. (Original) The method of claim 26, wherein said second device sets the filename of a record to NULL after that particular record has been transmitted to the second device.

28. (Original) The method of claim 1, wherein said first device stores information indicating which layers have been transmitted to the second device.

29. (Original) The method of claim 28, wherein said second device has access to said information indicating which layers have been transmitted to the second device.

30. (Original) The method of claim 1, further comprising:

transmitting at least some of the layers to a third device; and thereafter

retransmitting the layers at said third device to said second device.

31. (Original) The method of claim 1, further comprising:

rendering the image at the second device upon receipt of a first one of said plurality of layers.

32. (Original) The method of claim 31, further comprising:

updating the rendering of the image at the second device upon receipt of subsequent ones of said plurality of layers.

33. (Original) The method of claim 1, wherein layers are selected for transmission to first increase quality of the image that may be rendered at the second device.

34. (Original) The method of claim 1, wherein layers are selected for transmission to first increase resolution of the image that may be rendered at the second device.

35. (Original) The method of claim 1, wherein each layer selected for transmission is dependent on only particular layers that have been previously transmitted.

36. (Previously Presented) A method for storing and transmitting image data from a source device to a target device, the method comprising:

separating the image data into separate color planes, according to a particular color space;

transforming the color planes into a plurality of bands, each band from the plurality of bands including a plurality of bitplanes;

partitioning said image information at the source device into a plurality of layers, based on resolution and quality criteria, wherein a layer from the plurality of layers includes a subset of bitplanes from a first band from the plurality of bands and a subset of bitplanes from a second band from the plurality of bands;

storing directory information for the image at the source device allowing access to individual ones of said plurality of layers;

when the first device is initially connected to the target device, transmitting attribute information for the image;

transmitting at least some of the directory information to the target device, to allow the target device to control uploading of said image information; and

under control of said target device, transmitting selected ones of said plurality of layers from said source device to said target device.

37. (Previously Presented) The method of claim 36, wherein said target device initially selects a single layer for transmission that permits at least a crude rendering of the image.

38. (Original) The method of claim 36, wherein said step of transmitting selected ones of said plurality of layers includes:

successively fetching layers that allow rendering of the image at increasingly higher resolution.

39. (Original) The method of claim 36, wherein said step of transmitting selected ones of said plurality of layers includes:

successively fetching layers that allow rendering of the image at increasingly higher quality.

40. (Original) The method of claim 36, wherein said step of transmitting selected ones of said plurality of layers includes:

occasionally connecting the two devices from time to time; and

at each instance that the two devices are connected, transmitting at least one of said plurality of layers from the source device to the target device, until all layers have been transmitted.

41. (Original) The method of claim 36, wherein said step of transmitting selected ones of said plurality of layers includes:

connecting the two devices via wireless communication medium; and

while the two devices are connected via wireless commutation medium, transmitting a first one of said plurality of layers from the source device to the target device.

42. (Previously Presented) The method of claim 41, further comprising:

connecting the two devices via wireline communication medium; and

while the two devices are connected via wireline communication medium, transmitting subsequent ones of said plurality of layers from the source device to the target device, until all layers have been transmitted.

43. (Original) The method of claim 36, wherein said first device includes an imaging device.

44. (Original) The method of claim 36, wherein said second device includes a computer.

45. (Previously Presented) The method of claim 44, wherein said computer includes a selected one of a desktop computer and a server computer.

46. (Previously Presented) The method of claim 44, wherein said computer includes Internet connectivity.

47. (Previously Presented) A system providing a file format optimized for transmission of information between intermittently-connected devices, the system comprising:

a memory for storing image data;

logic for separating the image data into separate color planes, according to a particular color space;

logic for transforming the color planes into frequency bands;

logic for partitioning said image data into successive layers, wherein each successive layer stores information that permits rendering of the entire image at increasingly higher resolution and/or increasingly higher quality and wherein a layer from the successive layers includes a subset of the bitplanes from a first band from the frequency bands and a subset of bitplanes from a second band from the frequency bands;

logic for storing said successive layers in a file format, said file format comprising:

a plurality of records, each record storing information for a single layer, and

a directory for accessing a record of a layer that is to be uploaded to a destination device; and

logic allowing a destination device to control uploading of successive layers to the destination device.

48. (Previously Presented) The system of claim 47, wherein said file format includes a header section storing attribute information for the image.

49. (Previously Presented) The system of claim 47, wherein each record exists as a physical record corresponding to a file within a file system.

50. (Previously Presented) The system of claim 47, wherein each record exists as a logical record residing at a particular offset within a single binary object.

51. (Previously Presented) The system of claim 47, wherein said directory is modified after uploading of a layer, for indicating that that layer has been successfully uploaded.

52. (Previously Presented) The system of claim 47, wherein each of the layers is a two-dimensional enhancement of the complete image

53. (Previously Presented) A system providing an improved method of uploading image data, the system comprising:

a logic to separate the image data into separate color planes, according to a particular color space;

a logic to transform the color planes into frequency bands;

a logic to partition the image data into a plurality of layers, wherein each of the plurality layers includes information that permits rendering of the entire image, the plurality of layers being additive to render the image at increasingly better qualities and

wherein a layer from the plurality of layers includes a subset of bitplanes from a first band and a subset of bitplanes from a second band;

a logic to allow a destination device to control uploading of successive layers to the destination device.

54. (Previously Presented) The system of claim 53, wherein the better qualities comprise one or more of the following: increasingly higher resolution, increasingly higher quality, increasingly larger sizes, and wherein each layer is a two-dimensional enhancement of the complete image.

55. (Previously Presented) The system of claim 53, further comprising:

a first subset of layers to provide increasingly better image quality at a first resolution; and

a second subset of layers to provide increasingly better image quality at a second resolution, larger than the first resolution.

56. (Previously Presented) The system of claim 53, further comprising logic for storing said successive layers in a file format, said file format comprising:

a plurality of records, each record storing information for a single layer, and

a directory for accessing a record of a layer that is to be uploaded to a destination device; and

wherein said directory is modified after uploading of a layer, for indicating that that layer has been successfully uploaded.

57. (Previously Presented) The method of claim 1, wherein the first band from the separate bands is distinct from a lowest resolution level band from the separate bands.

58. (Previously Presented) The method of claim 1, wherein:

the separate bands include a third band; and

the layer includes all of the bitplanes of the third band.

59. (Previously Presented) The method of claim 1, wherein the selected layer of the plurality of layers is selected based on configuration, the configuration being controlled by the second device.